REMARKS

This Amendment is filed in response to the Office Action mailed on January 28, 2004. All objections and rejections are respectfully traversed.

Claims 1, 3-5 and 7-25 are pending in the Application.

At paragraphs 1-2 of the Office Action claims 24 and 25 were rejected under 35 U.S.C. § 112, first paragraph, on the grounds that computer readable media and electromagnetic signals propagating on a computer network are not sufficiently disclosed in the Specification.

Applicant respectfully points out that claim 24 claims a computer readable media, for example a magnetic disk, a CD ROM, a USB memory stick, etc., which has a computer program for the practice of the recited method written thereon. Applicant respectfully urges that there is no need to disclose computer readable media as any person skilled in the art of the invention knows how to write his/her computer program to a computer readable media. That is, the computer readable media is inherently known to a person who is skilled in the art of the invention.

Therefore, Applicant respectfully urges that claim 24 is allowable under 35 U.S.C. § 112, first paragraph, because there is no need to disclose a computer readable media in the Specification as the use of computer readable media is inherently in the skill set of a person of ordinary skill in the art of the invention.

Further, claim 25 claims transferring a computer program for practice of the method of the invention over a computer network such as the Internet. Any person skilled in the art of the invention knows that software is sold by downloading over the Internet. For example, even people of less skill than a person skilled in the art of the invention know that if they need a printer driver they simply download the driver software from an Internet web site of the printer manufacturer. Accordingly, Applicant respectfully urges that there is no need to disclose downloading software over the Internet, as knowledge of how to do so is inherent in the skill set of a person skilled in the art of the invention.

Therefore, Applicant respectfully urges that claim 25 is allowable under 35 U.S.C. § 112, first paragraph, because there is no need to disclose transferring software over a computer network such as the Internet in the Specification, as the use downloading software over the Internet is inherently in the skill set of a person of ordinary skill in the art of the invention.

At Paragraphs 3-4 of the Office Action claims 1, 3, 5, 7-10, 12-15, 17-20, 22, 23

were rejected under 35 U.S.C. § 102(e) as being anticipated by Hjalmtysson et al. U.S.

Patent No. 6,128,305 issued October 3, 2000 (hereinafter Hjalmtysson).

Applicant's claimed invention, as set out in representative claim 1, comprises in

part:

1. Asynchronous connection-oriented transmission network (10) of the ATM network type comprising a plurality of switching nodes (12, 14, 16, 18) interconnected by connection lines, each of said switching nodes being associated with a control point being in charge of determining the best route between any source node (12) and any destination node (18) when a connection has to be established therebetween by identifying which of the connection lines are eligible based upon the requirement of a quality of service;

said network being characterized in that each one of said plurality of switching nodes comprises:

Control ATM Test Application (CATMTA) means (22) and De-amon ATM Test Application (DATMTA) means (32) so that, at any time, a user interfacing a source node can test the connectivity of a network connection from said source node to a destination node by initiating a connection procedure wherein a call setup message (Fig. 1) is sent by the CATMTA means of said source node to said destination node and the DATMTA means of said destination node send back an acknowledgement message (Fig. 2) to said source node; and

said Control ATM Test Application (CATMTA) means (22) comprise means for sending a verification data stream (Fig. 3) to said destination node after receiving said acknowledgement message and said De-amon ATM Test Application (DATMTA) means (32) comprise means for sending back a response data stream after receiving said verification data stream, *said verification and response data streams being used to check the characteristics of the connection previously established between said source node and said destination node.*

Hjalmtysson discloses, at Fig. 9, the transmission of a quality of service request,

QoS REQUEST, by source node 901 to destination node 910, and in response to receiv-

ing the QoS REQUEST, destination node 910 sending a quality of service commit, QoS

COMMIT, message to source node 901. These messages are described by Hjalmtysson,

beginning at his Col. 16 line 65, as:

> "Fig. 9 illustrates an example of a call processing flow for dealing with a
> Q of S request originating from the calling party. In this example it is pre-
> sumed that the application requires a Q of S guarantee sometime shortly
> after the first hop connection is established. Thus, the Q of S request is
> sent shortly following the marker. Alternatively, applications may go
> through an end to end exchange, which could include data flows on a best
> effort basis. , before deciding what if any, Q of S needs to be established
> along the VC. In such an alternative case, the Q of S request may be gen-
> erated at an arbitrary time after the initial connection setup has been com-
> pleted.
>   Once transmitted, the Q of S request is processed at the switching
> stations 903 and 905, to determine whether the request can be satisfied.
> There are several alternatives, which we cover below, for how the network
> may exploit parallelism in processing the Q of S negotiations across
> switches. After receiving and processing the Q of S request, the Q of S
> destination 910 generates a Q of S commit, back to the Q of S source 901.
> Upon receipt of the Q of S commit, the Q of S request can send Q of S
> Data (in the forward direction). The requester subsequently transmits a Q
> of S Ack as an announcement to the destination. Upon receipt of the Q of
> S Ack, the destination may also begin to transmit data that is assured the Q
> of S." (Hjalmtysson, Col. 16 line 65 - Col. 17 line 23)

Applicant respectfully urges that Hjalmtysson, as is clear from the quoted para-

graphs above, simply exchanges Q of S request, commit, and Ack messages. The source

station then "trusts" that the network is working according to the Ack and COMMIT

messages.

In sharp contrast, Applicant claims testing the network in order to determine of the network is providing the desired, and committed, quality of service, as set out in claim 1 as: *said verification and response data streams being used to check the characteristics of the connection previously established between said source node and said destination node.*

Applicant defines the concept of *said verification and response data streams being used to check the characteristics of the connection* in the present Specification, especially in the present Specification beginning at Page 7 line 25 through page 8 line 21.

In the Specification, it is clear that Applicant is not simply sending a COMMIT or Ack message, but that Applicant is physically testing the connection through the network.

Applicant respectfully urges that Hjalmtysson has no disclosure of actually testing a connection through a network, as is claimed by Applicant.

Accordingly, Applicant respectfully urges that Hjalmtysson is legally precluded from anticipating the presently claimed invention under 35 U.S.C. § 102 because of the absence from Hjalmtysson of Applicant's claimed novel *said verification and response data streams being used to check the characteristics of the connection previously established between said source node and said destination node.*

At Paragraphs 5-6 of the Office Action claims 4, 11, 16, 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hjalmtysson and official notice of frame relay networks.

Applicant respectfully points out that claims 4, 11, 16, and 21 are dependent claims, and that they are dependent from independent claims which are believed to be in condition for allowance. Accordingly, the dependent claims are believed to be in condition for allowance.

At Paragraph 7 of the Office Action, the Examiner replied to Applicant's Arguments filed November 12, 2003.

The Examiner equates a Request and Commit message for quality of service with actually testing the network characteristics. Applicant claims actually testing the network characteristics.

Testing the network is totally different from simply sending request and commit messages. The difference is the difference between "trust" and "verify".

Simply acting on receipt of a request message, and receiving a commit message, is "trusting" the other entities of the network. The trust may be misplaced because the

15

network may not work as advertised, that is, the network may not deliver the promised quality of service.

In sharp contrast, Applicant actually tests the network. That is, Applicant "verifies" that the network is actually working.

Verification that the network is in working condition is claimed by Applicant as: *said verification and response data streams being used to check the characteristics of the connection previously established between said source node and said destination node.*

If the network is not working as advertised, then Applicant will learn of the failure. The cited Hjalmtysson method will not learn, Hjalmtysson simply trusts the request and commit messages.

REQUEST TO WITHDRAW FINALITY

Applicant respectfully requests that the Examiner withdraw the FINALITY of the Office Action mailed on January 28, 2004.

In support of this request, Applicant respectfully points out that Claim 12 and Claim 13 were not addressed in the Office Action, and that both Claim 12 and Claim 13 recite subject matter which is not disclosed by the cited Hjalmtysson patent. The text of claim 12 and claim 13 are:

12. The method as in claim 9, further comprising:
   checking an end-to-end transit delay of the connection using said verification and response data streams.

13. The method as in claim 9, further comprising:
   checking whether a bandwidth requested by a user interfacing said computer has been actually allocated for a constant bit rate over the connection using said verification and response data streams.

Applicant respectfully points out that there is no disclosure in the cited Hjalmtysson patent of Applicant's claimed *checking an end-to-end transit delay of the connection* as set out in Claim 12, and also there is no disclosure in the cited Hjalmtysson patent of Applicant's claimed *checking whether a bandwidth requested by a user* as set out in Claim 13.

Further, since there is no discussion of Claim 12 or Claim 13 in the Office Action, and since there is no disclosure of the claimed subject matter of *checking whether a bandwidth requested by a user* and no disclosure of the claimed subject matter *checking whether a bandwidth requested by a user*, the case should have been allowed rather than a FINAL Office Action issued.

17

Further, the Office Action mailed January 28, 2004, is a first Office Action, in response to Applicant filing a Request for Continued Examination (RCE) filed on December 16, 2003.

Accordingly, Applicant respectfully urges that the FINALITY of the Office Action mailed on January 28, 2004, be withdrawn.

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims, and therefore in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account

No. 03-1237.

Respectfully submitted,

A. Sidney Johnston
Reg. No. 29,548
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500